44 76 04/17/63 ATENT

Atty. Docket No. 43944 (prior docket no. 1710.23)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

e Application of

John M. Belcea

Serial No.: 09/847,170 : Examiner: Not Yet Assigned

Filed: May 3, 2001

FOR: Time Division Protocol For An Ad-Hoc,

Peer-To-Peer Radio Network Having Coordinating Channel Access To Shared Parallel Data Channels With Separate

Reservation Channel

RECEIVED

Group Art Unit: 2661

APR 0 8 2003

Technology Center 260.

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §§1.56 and 1.97-1.98, Applicants request that the Examiner consider the documents listed on the attached PTO-1449 Forms, which may be deemed material to the examination of the above-identified application. All of the documents cited on the attached PTO-1449 Forms are of record in parent application Serial No. 09/815,157, filed March 22, 2001, and therefore, copies of these items are not being provided in accordance with 37 C.F.R. 1.98(d)(2).

All documents, with the exception of French Patent FR2683326, are in English and require no statement of relevance. Regarding French Patent FR2683326, an English abstract is provided as a brief statement of relevance to the above identified Application as required under

37 C.F.R. § 1.98. Also, since the present Information Disclosure Statement is being filed prior to issuance of a first Office Action on the merits, no certification under 37 C.F.R. §§1.97 (e) or fee under 37 C.F.R. §1.17(b) is required.

The Examiner is requested to consider the attached documents in connection with the above-identified application and to return a copy of Form PTO-1449 to the Applicants with the Examiner's initials in the spaces provided.

Submission of this Information Disclosure Statement does not constitute an admission by the Applicants as to the materiality of the attached documents to the application, nor do the Applicants waive any right to challenge the validity of the documents as prior art should such action be deemed appropriate.

Respectfully submitted,

Ronald S. Grubb Attorney for Applicant Reg. No. 48,672

Roylance, Abrams, Berdo & Goodman, L.L.P. 1300 19<sup>th</sup> Street, N.W., Suite 600 Washington, D.C. 20036-2680 (202) 659-9076

Dated: <u>April 7</u>, 2003



APR 0 7 2003

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.	SERIAL NO.
43944	09/847,170
APPLICANT John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

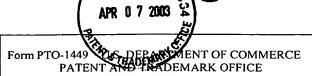
#### U.S. Patent Documents

				Sub-	Filing
Patent No.	Date	Patentee	Class	class	Date
6,359,872	03/19/2002	Mahany et al.	370	338	10/28/1997
6,349,210	02/19/2002	Li	455	450	11/03/2000
6,349,091	02/19/2002	Li	370	238	11/07/2000
6,327,300	12/04/2001	Souissi et al.	375	219	10/25/1999
6,304,556	10/16/2001	Haas	370	254	08/24/1998
6,285,892	09/04/2001	Hulyalkar	455	574	11/24/1998
6,275,707	08/14/2001	Reed et al.	455		10/08/1999
6,249,516	06/19/2001	Brownrigg et al.			01/27/2000
	_				03/26/1999
	05/29/2001	Hamilton et al.			05/30/1997
	04/24/2001	Odenwald et al.			01/31/2000
6,222,463	04/24/2001	Rai			06/25/1998
					06/01/1999
				_1	09/27/1993
6,192,053					09/07/1995
6,178,337					06/19/1997
		Naor et al.			09/15/1997
6,132,306	10/17/2000	Trompower	453	11.1	03/29/1996
6,122,690	09/19/2000	Nannetti et al.	710	102	04/17/1998
6,115,580	09/05/2000	Chuprun et al.	455	1	09/08/1998
6,108,738	08/22/2000	Chambers et al.	710	113	06/10/1997
6,078,566	06/20/2000	Kikinis	370	286	04/28/1998
6,067,297	05/23/2000	Beach	370	389	06/28/1996
6,067,291	05/23/2000	Kamerman et al.	370	338	09/23/1997
6,064,626	05/16/2000	Stevens	365	233	07/31/1998
6,052,752	04/18/2000	Kwon	710	126	11/14/1996
	04/18/2000	Chuang et al.	455	450	04/30/1997
	04/04/2000	Stracke Jr.	709	238	01/20/1998
	03/28/2000	Brownrigg et al.	370	238	12/06/1996
6,034,542	03/07/2000	Ridgeway	326	39	10/14/1997
	02/22/2000	Arimilli et al.	710	107	10/03/1994
5,991,279	12/23/1999	Haugli et al.	370	311	12/04/1996
				4	09/08/1997
	6,359,872 6,349,210 6,349,091 6,327,300 6,304,556 6,285,892 6,275,707 6,249,516 6,246,875 6,240,294 6,223,240 6,222,463 6,208,870 6,192,230 6,192,053 6,178,337 6,163,699 6,132,306 6,122,690 6,115,580 6,108,738 6,078,566 6,067,297 6,067,291 6,064,626 6,052,752 6,052,594 6,047,330 6,044,062 6,034,542 6,029,217	Patent No. Date 6,359,872 03/19/2002 6,349,210 02/19/2002 6,349,091 02/19/2002 6,327,300 12/04/2001 6,304,556 10/16/2001 6,285,892 09/04/2001 6,249,516 06/19/2001 6,246,875 06/12/2001 6,240,294 05/29/2001 6,223,240 04/24/2001 6,223,240 04/24/2001 6,208,870 03/27/2001 6,192,230 02/20/2001 6,192,053 02/20/2001 6,192,053 02/20/2001 6,183,37 01/23/2001 6,163,699 12/19/2000 6,132,306 10/17/2000 6,132,306 10/17/2000 6,15,580 09/05/2000 6,108,738 08/22/2000 6,067,297 05/23/2000 6,067,297 05/23/2000 6,067,291 05/23/2000 6,064,626 05/16/2000 6,052,752 04/18/2000 6,047,330 04/04/2000 6,047,330 04/04/2000 6,044,062 03/28/2000 6,044,062 03/28/2000 6,044,062 03/28/2000 6,049,217 02/22/2000 5,991,279 12/23/1999	6,359,872         03/19/2002         Mahany et al.           6,349,210         02/19/2002         Li           6,349,091         02/19/2002         Li           6,349,091         02/19/2002         Li           6,349,091         02/19/2002         Li           6,349,566         10/16/2001         Souissi et al.           6,285,892         09/04/2001         Hulyalkar           6,275,707         08/14/2001         Reed et al.           6,249,516         06/19/2001         Brownrigg et al.           6,246,875         06/12/2001         Seazholtz et al.           6,240,294         05/29/2001         Hamilton et al.           6,223,240         04/24/2001         Rai           6,208,870         03/27/2001         Lorello et al.           6,192,230         02/20/2001         Van Bokhorst et al.           6,192,053         02/20/2001         Angelico et al.           6,193,337         01/23/2001         Spartz et al.           6,163,699         12/19/2000         Naor et al.           6,132,306         10/17/2000         Trompower           6,122,690         09/19/2000         Nannetti et al.           6,15,580         09/05/2000         Chuprun et al.	Patent No.         Date         Patentee         Class           6,359,872         03/19/2002         Mahany et al.         370           6,349,210         02/19/2002         Li         455           6,349,091         02/19/2002         Li         370           6,327,300         12/04/2001         Souissi et al.         375           6,304,556         10/16/2001         Haas         370           6,285,892         09/04/2001         Hulyalkar         455           6,285,892         09/04/2001         Reed et al.         455           6,285,892         09/04/2001         Reed et al.         455           6,285,892         09/04/2001         Brownrigg et al.         370           6,285,892         09/04/2001         Brownrigg et al.         370           6,285,892         09/04/2001         Brownrigg et al.         455           6,249,516         06/19/2001         Brownrigg et al.         455           6,246,875         06/12/2001         Seazholtz et al.         455           6,240,294         05/29/2001         Hamilton et al.         455           6,223,2463         04/24/2001         Rai         340           6,208,870         03/27/2001	Patent No.         Date         Patentee         Class class           6,359,872         03/19/2002         Mahany et al.         370         338           6,349,210         02/19/2002         Li         455         450           6,349,091         02/19/2002         Li         370         238           6,327,300         12/04/2001         Souissi et al.         375         219           6,304,556         10/16/2001         Haas         370         254           6,285,892         09/04/2001         Hulyalkar         455         574           6,275,707         08/14/2001         Reed et al.         455         456           6,249,516         06/19/2001         Brownrigg et al.         370         338           6,249,516         06/19/2001         Brownrigg et al.         455         456           6,249,516         06/19/2001         Brownrigg et al.         455         432           6,240,294         05/29/2001         Hamilton et al.         455         432           6,240,294         05/29/2001         Hamilton et al.         455         456           6,223,240         04/24/2001         Rai         340         928           6,208,870

**RECEIVED** 

APR 0 8 2003

Technology Center 2600



## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

SERIAL NO. 09/847,170
GROUP 2661

U.S. Pat	ent Documents
ate	Patentee

Examiner	<u> </u>	U.S. Pai	tent Documents	<u> </u>	Sub-	Eiling
Initial	Patent No.	Date	Patentee	Class	class	Filing Date
Illitiai	Fatent No.	Date	rateffice	Class	Class	Date
	5,936,953	08/10/1999	Simmons	370	364	12/18/1997
	5,909,651	06/01/1999	<u> </u>	455	466	05/05/1997
	5,903,559	05/11/1999	·	370	355	12/20/1996
	5,896,561	04/20/1999		455	67.1	12/23/1996
	5,886,992	03/23/1999	<del>+</del>	370	410	04/15/1997
	5,881,372	03/09/1999		455	113	12/01/1995
	5,881,095	03/09/1999	Cadd	375	202	05/01/199
	5,877,724	03/03/1999	<u> </u>	342	357	03/25/199
	5,870,350	02/09/1999		365	233	05/21/199
	5,857,084	01/05/1999		395	309	10/02/1990
	5,845,097	12/01/1998	<del></del>	395	297	06/03/1996
	5,844,905	12/01/1998		370	443	07/09/1990
	5,822,309	10/13/1998	· · · · · · · · · · · · · · · · · · ·	370	315	06/15/1995
	5,809,518	09/15/1998	<u> </u>	711	115	05/20/1990
	5,805,977	09/08/1998		455	31.3	04/01/1990
	5,805,842	09/08/1998		395	306	09/26/199
	5,805,593	09/08/1998		370	396	09/26/199
	5,796,741	08/18/1998		370	439	03/05/199
	5,796,732	08/18/1998		370	362	03/28/1990
	5,794,154	08/11/1998		455	509	07/26/1990
	5,787,080	07/28/1998		370	348	06/03/199
	5,781,540	07/14/1998		370	321	06/30/199
	5,774,876	06/30/1998	Wooley et al.	705	28	06/26/199
	5,745,483	04/28/1998		370	335	09/29/199
"	5,717,689	02/10/1998	Ayanoglu	370	349	10/10/199
	5,706,428	01/06/1998	Boer et al.	395	200	03/14/199
	5,701,294	12/23/1997	Ward et al.	370	252	10/02/199:
	5,696,903	12/09/1997	Mahany	395	200.58	04/29/1994
	5,687,194	11/11/1997	Paneth et al.	375	283	04/22/1993
	5,684,794	11/04/1997	Lopez et al.	370	337	01/25/1990
	5,680,392	10/21/1997	Semaan	370	261	01/16/199
**	5,652,751	07/29/1997	Sharony	370	227	03/26/199
	5,631,897	05/20/1997	Pacheco et al.	370	237	10/01/199
	5,627,976	05/06/1997	McFarland et al.	395	308	03/20/199
	5,623,495	04/22/1997	Eng et al.	370	397	06/15/199
	5,621,732	04/15/1997	Osawa	370	79	04/18/199
	5,618,045	04/08/1997	Kagan et al.	463	40	02/08/199
	5,615,212	03/25/1997	Ruszczyk et al.	370	BECF	<b>VP</b> 17199:

08/03/1931

12/17/1985

09/17/1986

12/29/1986

01/02/1986

07/21/1982

Sheet 3 of 11 Form PTO-1442 U.S. DEPARTMENT OF COMMERCE PATENDAND TRADEMARK OFFICE ATTY. DOCKET NO. SERIAL NO. 09/847,170 43944 APPLICANT INFORMATION DISCLOSURE CITATION John M. Belcea GROUP **FILING DATE** (Use several sheets if necessary) May 3, 2001 2661 **U.S. Patent Documents** Sub-Filing Patent No. Date Patentee Class class Date 11/05/1996 5,572,528 Shuen 370 85.13 03/20/1995 09/10/1996 Radke 370 16.1 02/17/1995 5,555,540 09/10/1996 Zeller et al. 395 800 5,555,425 03/07/1990 5,517,491 05/14/1996 | Nanni et al. 370 29 05/05/1995 03/26/1996 370 69.1 08/01/1994 5,502,722 Fulghum 06/13/1995 Chazelas 342 70 04/09/1993 5,424,747 5,412,654 05/02/1995 **Perkins** 370 94.1 01/10/1994 12.1 5,392,450 02/21/1995 Nossen 455 01/08/1992 05/31/1994 370 60 5,317,566 Joshi 08/18/1993 5,241,542 08/31/1993 Natarajan et al. 370 95.3 08/23/1991 370 5,233,604 08/03/1993 Ahmadi et al. 60 04/28/1992 07/27/1993 Giles et al. 370 95.1 12/18/1991 5,231,634 455 39 5,068,916 11/26/1991 Harrison et al. 10/29/1990 07/23/1991 375 130 5,034,961 Adams 06/03/1988

Dublished II S. Datent Application

Mellon

Rackley

Lew et al.

Tejima et al.

Kobayashi et al.

Ho

342

379

342

370

370

364

45

269

457

95

74

200

03/20/1990

05/24/1988

05/03/1988

04/05/1988

10/14/1986

01/15/1985

4,910,521

4,747,130

4,742,357

4,736,371

4,617,656

4,494,192

	1	ublished 0.8	o. I atent Application			J
					Sub-	Filing
	Pub. No.	Pub. Date	Patentee	Class	class	Date
	2001/0053699	12/20/2001	McCrady et al.	455	513	02/06/2001

Foreign Patent Documents or Foreign Patent Applications

Document	Publication	Country or	1	Sub-	Trans	lation
No.	Date	Patent Office	Class	class	Yes	No
<u> </u>	ļ					
EP 0513841 A2	11/19/1992	EPO			X	
EP 0924890 A2	06/23/1999	EPO			X	
 EP 0627827 A2	12/07/1994	EPO			X	
WO 9912302	03/11/1999	WIPO			X	
WO 9839936	09/11/1998	WIPO			X	

RECEIVED

APR 0 8 2003

# Form PTO-1449 SHADPAKTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

#### INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.	SERIAL NO.
43944	09/847,170
APPLICANT John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

Foreign Patent Documents or Foreign Patent Applications Document Publication Country or Sub-Translation No. Date Patent Office Class class Yes No WO 9724005 07/03/1997 WIPO WO 9608884 03/21/1996 WIPO X X WO 0235253 05/02/2002 WIPO WO 0137483 05/25/2001 WIPO X WO 0137482 05/25/2001 WIPO X WO 0137481 05/25/2001 **WIPO** X WO 0135567 05/17/2001 WIPO X X WO 0133770 05/10/2001 WIPO WO 0110154 02/08/2001 WIPO X WO 0034932 06/15/2000 WIPO CA 2132180 03/16/1996 Canada X FR 2683326 07/05/1993 France X

Other Documents (including Author, Title, Date, Pertinent Pages, etc. Examiner Author, Title, Date, Place (e.g. Journal) of Publication Initial No. Wong et al., "Soft Handoffs in CDMA Mobile Systems", December 1997, IEEE Personal Communications Wong et al., "A Pattern Recognition System for Handoff Algorithms", July 2000, IEEE Journal on Selected Areas in Communications, vol. 18, no. 7 Andras G. Valko, "Cellular IP: A New Approach to Internet Host Mobility", January 1999, ACM Computer Communication Review Richard North, Dale Bryan and Dennis Baker, "Wireless Networked Radios: Comparison of Military, Commercial, and R&D Protocols", February 28-March 3, 1999, 2<sup>nd</sup> Annual UCSD Conference on Wireless Communications, San Diego CA Benjamin B. Peterson, Chris Kmiecik, Richard Hartnett, Patrick M. Thompson, Jose Mendoza and Hung Nguyen, "Spread Spectrum Indoor Geolocation", August 1998, Navigation: Journal of the Institute of Navigation, vol. 45, no. 2, summer 1998

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED

APR 0 8 2003

Technology Center 2600

E		PTO-					•	*				ATTY, DOCKET			5 of		
` .	6) WPP	UCAN	TS	NI E	S AN ROR	D I	PUE	BLK W	24	TICNS F	OR	43944		C	79/84	ל, ל	70
2003	ريد الله 42			8	IVI	EM	EN	Γ		eary)	Œ	APPLICANT. John M. Be	1cea				
DEMARY				••				nec	**	<del></del>		FILING DATE 5/3/200		G	IROUP 2	661	· .
	REFER	ENCE	30	DK3	NAT		N			U.S. P/	TENT	DOCUMENTS	·				
	EXAMPER BETVL			100		(T ):		 91		DATE				<del></del>		PLK	DATE
		М	5	9	4	3 .	3	2	2	8/99	Mayo	or,et al.	- a		\$180758	FARR	OPPLA
		М				٦	7		-	3/33	ray	n,et al.	370	)	280		· _
·•		Ж				_	1	7									
		Ю				7	7	$\exists$			<del> </del>				<u> </u>	<u> </u>	
•		Æ	L				]	_							}	<b> </b>	
•		AF	_		$\coprod$	$\bot$	$\Box$									<u> </u>	
•		<b>M</b>	_		$\sqcup$	4	$\perp$	$\bot$		-			_		<del> </del>		
. •		AH A	-	-	$\vdash \downarrow$	4	4	4	_						<del> </del>	<del> </del>	
•		N	-	-	╟┼	4	4	4	_						<del>                                     </del>	<u> </u>	
-		~	-		$\vdash$	+	+	$\dashv$	-		ļ						
			ــــ			_	_			251011							
			_					-	7	TEIGN	ATE	NT DOCUMENT	rs ·				•
				W	120	TH	æ	R		CAJE		COLNTRY	αι	<b>z</b>	2507.22	TRAXS	MID
_		Æ			T	T	T	T	7							YES	Ю
_		Ж			$\top$	+	+	$\dagger$	7								
		Ж			1	$\dagger$	+	╁	+						-		
_		Ю			+	+	+	╬	┥								
		R			十	+	╁	+	4				_ _				
_		ОТН		,! ,			٠,		_			·					
-	· · ·	711				-11	• (	inc	UK.	iding A	uthor,	าเมือ, Date, Pe	rtinont	Pa	ges, Etc	.)	
	j	AR .		'' <i>\</i> 	A R	eν	ìe	W	Ò	f Curr	ent I	Routing .Prot	ocols	£o	r Ad-H	oc M	obi
_														•			
	İ		-	"T	ne	Dy	na	mi	c	Sourc	e Roi	ver. et al., uting Protoc	ol for	O	r Cali	I∵. Āत म	<u> </u>
	ł	A								· ·							
			4	re'	rF	MA	NE	T.	Wc	rking	Grou	p;Josh Broc	h, et	a1	., 12/	98.	
		AT	]	!!Ac	1 h	oċ	0	n.	De	emand	Dist	nce Vector	Pout:	<u> </u>	dro f+	iote	
	j	~ [	1	aui	TA ~	vo	. L	χt	٠٠,	, MODI	Le. Ad	1 Hoc Networ	king	47.7	k toro-G	TO IL	-ma
_	ĐXIII.				Tha	rl	es	E	<u>.</u>	Perki	ns	t al. Marc	h 2,	200	1.	ap	,
	\u00fan	wert.									.	DATE CONBIDE					
														•			

of this form with next communication to applicant. (Information Disclosure Statement—Section 9 PTO-1449 (Modified) [6-1]—

APR 0 8 2003

sheet 6 of 11

JOHN M. BELCEA

PORM PTO-1449 (Modified)

0 7 2003

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE **STATEMENT** 

ATTY, DOCKET NO. 43944

(Use several sheets if necessary)

		• •			_		••		FILING DATE 5/3/200		G	POUP 2	11.1	
REFERE	NCE	Kasd	3NA.	TIO	Ń		U.S. PA	TENT	DOCUMENTS	· ·			001	
EXAMPER RETYL		X	XXX	9(T )(	UMBER		DATE		•		<u>-</u> -		RUK	DATE :
	W		$\prod$		T	$T^{\dagger}$			ME	$\dashv$	CUS	ENECTES	F APPR	OPPLATE
	M		$\prod$			11								
	K											<del> </del>	·	
	Ю		$\sqcup$			П						<del> </del>		
	Æ		$\downarrow \downarrow$	$\sqcup$		$\square$				-		<del> </del>	<del> </del>	
	₩ M		╂╼┨	$\vdash \downarrow$	- -	11				$\neg$		<del> </del>	<del> </del>	
	H		╁┤	$\vdash \vdash$	+	╂╌┦						<del> </del>	<del> </del>	
	N		╁┤	├┤	+-	++						].		
	N		+	$\vdash \vdash$	+	╁┼								
	ж		$\Box$		+	†+						·		
					1	FOR	FIGNE	ATE	NT DOCUMEN			i		
T						- 1			NI DOCUMEN	TS T		·		•
		X	CLEE	MK	-881		CATE		COLATRY	ı	arz	SETIAS	TRAKS	LATICH
	A.	$\top$	П	T	$\top$	$\Gamma^{+}$						access	YES	Ю
	H	+	╁┤	$\dashv$	- -	╁┼			<del></del>			•		
	-AX		╂╌┨		4_	$\sqcup$			•			·		
		- -	Н	4	4	Ц								
	0	1	Ш							$\dashv$	<u> </u>	<del> </del>		
	R			T		П			•		·	<u> </u>	<b> </b>	
(	ОТН	ER.		AR	T (In	rclu	dlna A	ther	, Title, Date, P			<u></u>	L	L
		,,,,							, ride, Date, P	orun	ent Pa	ges, Etc	<u>.)</u>	
	A		pti	CM X	zed	Li	nk Sta	ate !	Routing Pro	toco	1", T	ete ma	NET	Working
		- -					MP O		ct, et al,	sept	ember	2, 20	<del>01</del>	
		T''	ħe	Dy	nam	ic	Source	Rot	uting for M	obil	e Ad	Hoc Ne	twor	ks". II
	ļ													
		7	IAL!		OIK	TUG	Group	D. Da	avid B. John	nson	, et	val.,	Ma	rch 2,2
	AT .										•			
	··· ]													
									• . •					<del></del>
EXAMIN			<del>-</del> -					<del></del>	DATE CONSID					•

XAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Information Disclosure Statement—Section 9 PTO-1449 (Modified) [6-1]—

RECEIVED

APR 0 8 2003

PORU	PTO-	140	د) و	loa	fled	<u>ر</u> (		) .	· 1.		ATTY, DOCY		33	RIVL HO.	1=_	
, mai	CF PA	TE	an	AN	D F	2UE		CA.	nchib fo	ล	43144	•	09	/847,	170	
APPL	مدعد	<u>C3</u>	WF	ORI	MY.	TIO	HI	DIS	CLOSUR	Ē	APPLICALIT					
/ _	\ P &	·	_/_	λTI							TT DOM!	John	M. Be	lcea		
APR	872	do	R	sh	••b	a H	ne	0	een)		Divo perso		<u> </u>			
. 2		_	ٳڲۣٳ								FIUNG DATE 5/3/2001		O.F	KOUP 2	661	
REFER	EN COEN		Sia	ואא	nc	H			U.S. PA	TENT	DOCUMENTS		ı			<del></del>
EXHER												<del></del>				
KIN.			m	LLE	XT Y	110	FRI.		DATE		WII -				FLHO	
	W	5	5		3		_				N/LE		123	STATES	F APPRO	PPUTE
	М	5	6	-	4	0 5	_	_	7/96 7/97		adi, et al.	370		94		
	K	5	7	-	8	6	-	4			chot, et al.	370		437		
<del></del>	120	<del> </del>	-	┝─┤	-		·	-	5/98	Kond	10	370		347		
	Æ	5	7	<del>   </del>	7	0	7	6	7/98	Ande	erson, et al.	370		294		
	₩.	5 6	9	-	7	<u>0</u> 3	1	1-	11/99	Toh		370		331		
	Ю	1-	<del>  -</del>	1-1		-	-	1	1/00		cert, et al.	37	0 .	280		
•	ᄲ	6	0		8			3	2/00	1	rtsen	37	0	338		
•	H	6	0	2		0		4	2/00	Irv		45	50	571		
	l N	6	0	5		1	1	6	5/00	1	ak, et al.	37	0	313		
	- K	6	0	<u>8</u>		3 7	3	+-	7/00	1	mond, et al.		0	280		
		10	10	19		1/	٥	<u> </u>	8/00		cson, et al.	37	0	280	<u> </u>	
	<u> </u>	<del>                                     </del>		· · ·				-	HEIGH	PATI	ENT DOCUMENTS	3			·	
,		1	M	O.S	י וזה	uis	<del> </del>		NITE	'	644 s seem s			·	TRUS	HOULT
		1.		~~~	-111	r.i.,vac	JU1		CAJE	1	MIKKO	1. 0	mz	STITE	-	<del></del>
	H.		T	T	· ·	T	Г	T		1		- -			YES	(H)
•	K	十	+	╁	-	-	╀	╁		-		B	ĖCE	WED		
	<del> </del>	-	-	1_	<u> </u>	L	1_					1.		IVLI)		
-	H					1						1	•	<del>\$ 2003 -</del>		1
	B							T				<del>Techn</del>	<del>ology (</del>	enter 260	R .	-
	R	1	1	1		-	-	T		<del> </del>			· ·		<del></del>	<del> </del>
	-		<u> </u>	<u></u>	<u></u>		<u> </u>	1_	1	<u></u>				<u> </u>		
	ОП	ne:		· ·	A	нT	(]:	nc	luding A	utho	r, Title, Date, Per	Uno	nt Pa	gos, Et	c.)	
· .			'	Top	plo	ЭУ	Co	ntı	rol of Mi	ıltih	op Wireless Networ	ks u	sing	Transmi	Powe	r
•	HA.		0.	log:	ies	(I	Div	is:	ion of G	re). (	athan and Regina R Cambridge, Mass. 1	osal 997	es-Ha	in; BBN	Techn	<u>-</u>
		+	+										·			-
· · · · .	l H		b	y J	J.	G:	arc	ia.	-Luna-Ace	ion-A eves	voidance Handshake and Asimmakis Tzam	in '	Wirel kas:	ess Neta Baskin !	works" School	
											of Calofornia, Sa					
	1	+	٠.											•		
E	I AT		E	lli	ot	an	<u>1</u> E	20b	_Helle: 1	-neal	ing Wireless Netwo echnologies, Cambr	orks"	, by	Chip		
,						. 2				·	Cambr	uge.	Mass	<del></del>		
EVIII	11.2-	_ل_		-				<del></del>	<del></del>					<del></del>		
EXM	REMAIN	•									DATE COLIGINE	<del>د.</del>				

sheet 7 of 11

FORM PTO-1449 (Modified) ATTY, DOCY SERIAL HO. LIST OF PATENTS AND PUBLICATIONS FOR 43944 09/847,170 APPLICANTS INFORMATION DISCLOSURE APPLICANT **STATEMENT** John M. Belcea several sheets if necessary) OROUP 2661 APR 0 7 2003 FILING DATE 5/3/2001 **CESIGNATION** REFEREN U.S. PATENT DOCUMENTS FILL GI KIM PLHO CUTE FEDERAL TIGUESCOOL DATE ME CI TA STATE F APPROPRIATE u 6 2 8/00 Robert, et al. 370 389 K 8 3 6 8/00 Agrawal, etal. 370 311 K 30 8 8 10/00 Stiller, et al. 370 238 W Æ H М Ж H IJ FOREIGH PATENT DOCUMENTS KILLEKST MALINE TO THE TOTAL THE TO CATE WATER arz 22733 YES B H BECENTED Ш <u>adadera a 202003</u> Ж Technology Genter 2600 Ю OTHER ART (Including Author, Title, Date, Perlinent Pages, Etc.) "A Performance Comparison of Multi-Hop Wireless Ad Hoc Netwrk Routing Protocols", by Josh Broch, et al., Carnegie Mellon University, M Pttsburgh, Pa., Proceedings of the Fourth Annual ACM/IEEE International Conference on Mobile Computing and Notworking; 1998. "USAP:A Unifying Dynamic Distributed Multichannel TDMA Slot Assignment H Protocol", by C. David Young, Rockwell International, Richardson, Texas "Net Throughput with IEEE 802.11 Wireless LANs"", by Ad Kamerman and I Guido Aben, Lucent Tech., Nieuwegein, The Netherlands EXMINER: DATE CONCINENCE

											\$	heet	9 of	)1	
PORM	PTO-1	449	(Mo	dile	σ (		•	. 3	-	ATTY, DOCY	).	<b>33</b>	RIAL HO		
Light (	OF PAT	EH	A an	ND	PUE	SUC	T.C	KHB F(	ж.	43744		0	9/847,	170	
APPL	TP.	% E	vipo Rya	RAU	IEM	T H C	XX	CLOSUR	Ε	APPLICAIT			<del></del>		
	(Use i		. `							John M. Belcea				•	
AP	R 0 7 7	003	ري الله الله		<b></b>			<b>-≖</b> γ)		FILING DATE 5/3/2001		QI	HOUP 2	661	
REFER	TRADE	G Fee	NO.	ATX	Ж			U.S. PA	יובאו	DOCUMENTS		l		<del></del>	
<b>EXPRIN</b>			•							•	T			- Dan	0.27
RIVL		1	m	DOI:	XULO	ER .		DATE		KVIE	a	ाज्य <b>े</b>	ಉದಾಚ	FLHO F XYYO	-
	М	-	- -	1_			_					•			
	10	-	-	-					<u> </u>						
•	K		- -	4_				<del></del>	<u> </u>				:		
	KE GK		- -				_	·	ļ						
· .	Æ			╬			-		<b> </b>						
***************************************	Ю		+	╅	1-	$\vdash$	$\dashv$		· · · ·	•	<del> </del>	HE	CEIVE	D	
	KH			+	╁╴		$\dashv$		-	····	-	AP	0.8 20	<b>1</b> 3	·
	· N		+	+	╁╴							ehnol	gy Center	2600	
	N		7	+	1				-						
				_	<del></del>	1-1		<del> </del>	-}				1	J ·	
	, W	$oldsymbol{\bot}$	للــٰـ					}	.1		- 1				
	K.	Щ		٠Ļ	<u>.                                    </u>	L F	:O!	REIGH	PATE	ENT DOCUMENTS	<u></u> :				
· .	K				<u>.</u>		: O:	REIGH	PATI	ENT DOCUMENTS	<u> </u>				
	I K				H		01	REIGH CUTE	PATI	ENT DOCUMENTS		172	SEOLES	TRUS	HOUNT
					H		01		PATI			1172	SEUTZ	TPLXS	KOTEL
	R.						01		PATI			1722	SEUTZ	-	
	H.				H		01		PATI			IIZ	SEUTZ	-	
	R.						O		PATI			1772	SECLES	-	
	H.				HUL		0)		PATI			1772	SECULES	-	
	IL HA				His		01		PATI			1772	ZADAZ	-	
	IL IX					<b>EER</b>		CATE		TAIKOO				TES	
	H H H H H H			 	I I	æR	neli	uding A	Autho	or, Title, Date, Per	tine	nt Pa	ages, Et	TES Co.)	Ж
	H H H H H H		"Tr	Tans	ART	(In	ncli n-E	uding A	Autho	or, Title, Date, Per	tine	nt Parks I	agos, El	c.)	HO te
	IL HA	ier	"Tr	ans	ART mis:	(Insion",	nclina-E	uding a	Authorit Rou	or, Title, Date, Perting in Wireless Na-Luna-Aceves, Bas	tine	nt Parks U	Iges, El	c.)	HO te
	IL IX	ier	"Tr	ans	ART mis:	(Insion",	nclina-E	uding a	Authorit Rou	or, Title, Date, Perting in Wireless Na-Luna-Aceves, Bas	tine	nt Parks U	Iges, El	c.)	HO te
	IL HA	ier	"Tr	A rans	ART missit ations it re-	(Insion Assion I	ncline, b	uding a	Authorit Rouris, Sarci, Basi	or, Tille, Date, Per ting in Wireless Na-Luna-Aceves, Bas anta Cruz; 1997, ocol", by J.J. Gar kin School of Engi	tine	nt Parks U	Iges, El	c.)	HO te
	IL IX	EF	"Tr Inf Ilhi and of	A canso communication communic	ART missite re-learned life	(Insion Instantion Ins	nchin-E	uding Afficier  y J.J. aliformed Mesh Madruga Santa	Authorit Rouris, Basic Cruz;	or, Tille, Date, Perting in Wireless Na-Luna-Aceves, Basenta Cruz; 1997. ocol", by J.J. Garkin School of Engil	tine	nt Parks U	Jsing Ling Ling of Encolor Enc	c.)	HO te
	IL IX	lEF	"Tr Infilmine and	rans corm cor cor cor cor cor cor ime	ART missit: re-lertocomizadia	(In sion on in action 1 Page	n-E ist	uding A fficier y J.J. aliformed Mesh Madruga Santa of an A t Radio	Authout Routian Protection Protec	or, Tille, Date, Per ting in Wireless Na-Luna-Aceves, Bas anta Cruz; 1997. ocol", by J.J. Garkin School of Engit 1997.	tine	nt Parks U	Jsing Ling of England Cores	c.)	HO te
	IL IX	lEF	"Tr Infilmine and	rans corm cor cor cor cor cor cor ime	ART missit: re-lertocomizadia	(In sion on in action 1 Page	n-E ist	uding A fficier y J.J. aliformed Mesh Madruga Santa of an A t Radio	Authout Routian Protection Protec	or, Tille, Date, Perting in Wireless Na-Luna-Aceves, Basenta Cruz; 1997. ocol", by J.J. Garkin School of Engi	tine	nt Parks U	Jsing Ling of England Cores	c.)	HO te

										4.				-	sheet 10	e of 11	_		
•	PORM					•				ATTY, DOCY TO.			1 8	SERIAL HO.					
	LIST OF PATENTS AND PUBLICATIONS FOR .											43944			09/847,170				
61	PE	) \	. 8	TAT	EM	EN	m i T	פונ	crosn	IRE	N	ALTCY1							
	~ 2 2000 C	ا محال:	erren	al ah	eet	a H	Nec	<b>)</b>	enn)		<b> </b> -	John	M. Be	Icea					
! _	0 7 2003 Chilles several sheets if necessary)											UNA DA			2661				
(61	ALEMAN	EHCE	KZZO	3XX	TIC	H			U.S.	PATENT	DOC	UMENTS		l			·		
	DYMHE!				·						•	<del></del> :		<del></del>	T				
_	אניאר		FEDERAL THELESCOT						DATE		W <del>u</del> e		·	ans	enons	FLHD CATE FAMMOMATE			
		W					·								-	FAITU	LIMIE		
		18										· · · · · · · · · · · · · · · · · · ·							
_	w <b>a</b>	<b>K</b> ·										<del></del>			-		<del></del>		
		Ŋ												<del></del>	-}				
٠ _		Æ														<del> </del>			
-		₩.		4								•		F	REIVI	₽D			
. ·. •		М	- -	1	L									1	APR 0 8 20	1113			
	<del></del>	H	- -	-	<u> </u>	_		_					.		onlogy Cente				
•	·	N		-	<del> </del>	_	_	_							Ty Carite	<del>12600</del> -			
•		N W	╂╾╂╌	-	<del> </del>	-	_	_	<u> </u>										
. •		<u> </u>	<u> </u>	ـــاـــ		ــــــــــــــــــــــــــــــــــــــ	1	<u></u>	J	!			<del></del>						
		· ·						FO	REIGI	TA9 H	ENT	DOCU:	MENTS	٠	. :				
· ·.		THE RESULT THE STOOL							NITT	.   '	Mamu					HOTLESAST			
			•						CAJE		COLUMN			arz	2 STITE	YES			
		IL.	IT	T	T	Γ	Τ	Γ		_			<del></del>		_	110	(H)		
٠.	•	H	11	1	1	<del>                                     </del>	╁╴	$\vdash$			•		·	-		-	-		
		Ж	11	1	十	-	十	-	<del> </del>			<del></del>							
		Ю			╁	╁╾	+	-	<del> </del>			<del></del>	<u> </u>						
•		I AP	-	+	╀	╀	┼	╀	<del> </del>				<u> </u>	<u> </u>					
•	<del></del>	1			۲.		1	_	<u> </u>				<del></del>	<u> </u>					
•		1017	IER		_A	HT	11)	ncl	uding	Autho	r, T	llo, Da	to, Porti	nenti	Pages, Et	c.)			
				"Hio Lual:	era itv	rch —of	iica I–S€	all erv	y-Orga ice Su	mized,	Mult	ihop Mo	bile Wir	cless	Networks artha Stee	for			
	_	I AR												ard M	artha Stee	nstrup	); 		
			1 1'	BBN Systems and Tech., Cambridge, Mass. 1995 "Dynamic Multipoint Virtual Circuits for Multimedia Traffic in Multipop Mobile Wireless Notworks"															
		H	1	Martha E. Steenstrup; BBN Tech.												zh.,			
•	<u> </u>			Cambridge, Mass. 1995															
		1	III									· · · · · · · · · · · · · · · · · · ·							
		\T	1				·			<del></del> -						····			
									•										
	EXM	INSE IT								<del></del>		DATE ~	MICIDED	~~	<del></del>				

							<u>.</u>					_she	t 11 of_	<u>11</u>		
FORM		•	•					5.	l	ATTY, DOC: 'NO. SERIAL HO.						
LET (	CF PAT	EHT	8 A	םא	PUE	LK.	<b>LAT</b>	TCHE FO	ค ่	43944 09/847,170						
APPL				TEM			ek —	CLOSUR	E	APPLICANT						
	(U>+ 1	•				. 1	P		John M. Belcea							
					AP	R O		003 <sup>2</sup>	FILING DATE  5/3/2001			3ROUP 2661				
REFER	ENCE I	)ESX	אנ	rng	N.	_			TENT	DOCUMENTS		<del></del>				
DYMHG!		RADEN												Banan		
- KIM		a	m:	E(T)	dia.	<b>ER</b>		DATE		KILE	ans	grans	FLHICKTE FAMMOMUTE			
	<u> </u>		1													
	В	_ _	1_							·		<del></del>				
•	K		1	1_								<del></del>				
•	N)			1_								<del></del>	-			
·	Æ		4_	4_			_			·						
•	HF .	-	- -		-		<u> </u>			•		RE	CEIVE	5	····	
<del></del>	N		+	4-	<b> </b>	_	_	ļ					0 0 200		•	
•	<del>                                    </del>	-	- -	+	<del> </del>	_	_	<b> </b>	<del> </del>				7 0 0 200	ή		
<del></del>	N N			+	╂	_	_		<del> </del>			recringi	opy Center	(6)		
	- X		+	-	╂	-	-		<del> </del>			·	<u> -</u>			
	1	<u> </u>			_ـــــــــــــــــــــــــــــــــــــ	٠	<u> </u>	]	<u> </u>			<u> </u>		<u> </u>		
		<del>-</del>		-				HEIGH	PATE	NT DOCUME	RTS			•		
	THE RESIDENCE							NITE		Marry	~		KATITERWILL			
	·	- TOTAL INCOME					LAIL		MIKOO	anz	SECTION	YES	CK			
,	A		T	7	T	Π					<del></del>		-	1 100	1 12	
	K		-	十	╁	十	╁╴	<del> </del>	<del> </del>		<del></del>			-		
	Ж	- -	+	- -	╁	┼-	┼-	<del> </del>						1		
	<del> </del>	$\left  \cdot \right $	- -	4	-	<del> </del> _	_	ļ	<u> </u>			]				
-	10		4					<u> </u>								
	<i>K</i>														1	
	OTI	IER		A	RT	(lı	ncl	luding A	lutho	r, Title, Date,	Porti	nent P	ages Ff	c.)	1	
			'ီထ	llis	sion	ı–A	voi	dance Th	ranemi	ccion Cob - 1-1	) C					
"Collision-Avoidance Transmission Scheduling for by Zhenyu Tang and J.J. Garcia-Luna-Aceves, Uni											iversity of California					
·		1-1	Santa Cruz, Calif., 1997.													
	I II		"QoS Networking with Adaptive Link Control and Tactical Multi- Channel Software Radios", by George Vardakas, et al., Communications													
•	~	[5	Systems Div. of Raytheon Systems Co., San Diego, Calif.; 1997.													
	-	-	·							w., ball	· Diego	, call	., 1997,	•		
	II.						_									
											<del></del>	:				
EXAL	IIVER I	<del>-</del>				<del></del>				T	<del></del> -					